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45503 7590 04/01/2008

DILLON & YUDELL LLP  
8911 N. CAPITAL OF TEXAS HWY.,  
SUITE 2110  
AUSTIN, TX 78759

EXAMINER

CHEN, WENPENG

ART UNIT

PAPER NUMBER

2624

DATE MAILED: 04/01/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,973	10/25/2001	Dwight Ross Palmer	BLD920010004US1	8639

TITLE OF INVENTION: AUTOMATIC METHOD OF IDENTIFYING IMAGE SUBREGIONS FOR REUSE DURING DATASTREAM TRANSMISSION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	07/01/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

## HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

**PART B - FEE(S) TRANSMITTAL**

Complete and send this form, together with applicable fee(s), to: **Mail Stop ISSUE FEE**  
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**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

45503            7590            04/01/2008  
**DILLON & YUDELL LLP**  
8911 N. CAPITAL OF TEXAS HWY.,  
SUITE 2110  
AUSTIN, TX 78759

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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)

(Signature)

(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,973	10/25/2001	Dwight Ross Palmer	BLJ920010004US1	8639

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nonprovisional	NO	\$1440	\$300	\$0	\$1740	07/01/2008

EXAMINER	ART UNIT	CLASS-SUBCLASS
CHEN, WENPENG	2624	382-232000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 \_\_\_\_\_  
2 \_\_\_\_\_  
3 \_\_\_\_\_

## 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY AND STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent):  Individual  Corporation or other private group entity  Government

## 4a. The following fee(s) are submitted:

## 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- Issue Fee
- Publication Fee (No small entity discount permitted)
- Advance Order - # of Copies \_\_\_\_\_

- A check is enclosed.
- Payment by credit card. Form PTO-2038 is attached.
- The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

## 5. Change in Entity Status (from status indicated above)

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS; SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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45503	7590	04/01/2008		
DILLON & YUDELL LLP 8911 N. CAPITAL OF TEXAS HWY., SUITE 2110 AUSTIN, TX 78759				EXAMINER CHEN, WENPENG
				ART UNIT 2624 PAPER NUMBER DATE MAILED: 04/01/2008

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1627 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1627 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

<b>Notice of Allowability</b>	<b>Application No.</b> 10/039,973	<b>Applicant(s)</b> PALMER ET AL.
	<b>Examiner</b> Wenpeng Chen	<b>Art Unit</b> 2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to interview with Applicants' representative on 3/11/08 and BPAI decision on 2/11/2008.
  2.  The allowed claim(s) is/are 1-24.
  3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a)  All    b)  Some\*    c)  None    of the:
      1.  Certified copies of the priority documents have been received.
      2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.
- Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**
4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a)  including changes required by the Notice of Draftperson's Patent Drawing Review ( PTO-948) attached 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
    - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
  6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

/Wenpeng Chen/  
Primary Examiner  
Art Unit: 2624

***Examiner's Amendment/Statement***

1. This office action is based on the decision of the Board of Patent Appeals and Interferences dated 2/21/2008 and the following amendments.
  
2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Brian Russell on 3/11/2008.

3. The application has been amended as follows:  
  
**In Claims: Replace Claims 1, 2, 8, 9, 10, 16, 17, 18, and 24 with the following amended claims.**

1. A method for reducing datastream transmission bandwidth requirements, comprising:  
  
in response to determining that an image data structure is present in a datastream, wherein the image data structure contains data of an image;  
  
extracting said image data structure from said datastream;  
  
dividing said image data structure into one or more subregions;

associating a corresponding identifier with a first selected one of said one or more subregions;

in response to determining that said first selected one of said one or more subregions is substantially identical to a second selected one of said one or more subregions,

replacing second selected one of said one or more subregions with said corresponding identifier of said first selected one of said one or more subregions;

reducing transmission bandwidth requirements by generating a packaged image, which includes a decoding table comprising said first selected one or more subregions and said corresponding identifier of said first selected one of said one or more subregions in place of said second selected one of said one or more subregions, wherein the decoding table contains all identifiers needed for decoding the data stream; and

inserting said packaged image into said data stream; and

transmitting said modified data stream.

2. A method for decoding a packaged image, comprising:  
determining whether a packaged image is present in a datastream;  
responsive to determining that a packaged image is present in a datastream, extracting the packaged image;

separating the packaged image into an image data structure and a decoding table containing one or more references and one or more corresponding identifiers, wherein the decoding table contains all identifiers needed for decoding the data stream; and

modifying the image data structure to replace any identifiers present in the image data structure with corresponding references, wherein the references represent subregions of at least one image.

8. A method for reducing datastream transmission bandwidth, comprising:  
examining a datastream for the presence of one or more image data items, wherein the one or more image data items contains data of an image;

responsive to the presence of one or more image data items, examining the one or more image data items for the presence of one or more repeated visual data elements;

responsive to the presence of one or more repeated visual data elements, recoding the datastream to include one or more replacement markers inserted to replace the one or more repeated visual data elements and a decoding table for translating the one or more replacement markers during decoding, wherein the decoding table contains all identifiers needed for decoding the data stream.

9. An apparatus for reducing datastream transmission bandwidth requirements,  
comprising:

means for, in response to determining that an image data structure is present in a datastream, wherein the image data structure contains data of an image;

means for extracting said image data structure from said datastream;

means for dividing said image data structure into one or more subregions;

means for associating a corresponding identifier with a first selected one of said one or more subregions;

means, in response to determining that said first selected one of said one or more subregions is substantially identical to a second selected one of said one or more subregions,

means for replacing second selected one of said one or more subregions with said corresponding identifier of said first selected one of said one or more subregions;

means for reducing transmission bandwidth requirements by generating a packaged image, which includes a decoding table comprising said first selected one or more subregions and said corresponding identifier of said first selected one of said one or more subregions in place of said second selected one of said one or more subregions, wherein the decoding table contains all identifiers needed for decoding the data stream; and

inserting said packaged image into said data stream; and

means for transmitting said modified data.

10. An apparatus for decoding a packaged image, comprising:

means for determining whether a packaged image is present in a datastream;

means for, responsive to determining that a packaged image is present in a datastream, extracting the packaged image;

means for separating the packaged image into an image data structure and a decoding table containing one or more references and one or more corresponding identifiers, wherein the decoding table contains all identifiers needed for decoding the data stream; and

means for modifying the image data structure to replace any identifiers present in the image data structure with corresponding references, wherein the references represent subregions of at least one image.

16. An apparatus for reducing datastream transmission bandwidth, comprising:  
means for examining a datastream for the presence of one or more image data items, wherein the one or more image data items contains data of an image;  
means for, responsive to the presence of one or more image data items, examining the one or more image data items for the presence of one or more repeated visual data elements;  
means for, responsive to the presence of one or more repeated visual data elements, recoding the datastream to include one or more replacement markers inserted to replace the one or more repeated visual data elements and a decoding table for translating the one or more replacement markers during decoding, wherein the decoding table contains all identifiers needed for decoding the data stream.

17. A computer program product in a computer usable medium for reducing datastream transmission bandwidth requirements, comprising:  
a computer usable medium, wherein the medium is a computer hardware storage medium;  
instructions on the computer usable medium for,

instructions on the computer usable medium for, in response to determining that an image data structure is present in a datastream, wherein the image data structure contains data of an image;

instructions on the computer usable medium for extracting said image data structure from said datastream;

instructions on the computer usable medium for dividing said image data structure into one or more subregions;

instructions on the computer usable medium for associating a corresponding identifier with a first selected one of said one or more subregions;

instructions on the computer usable medium for, in response to determining that said first selected one of said one or more subregions is substantially identical to a second selected one of said one or more subregions,

instructions on the computer usable medium for replacing second selected one of said one or more subregions with said corresponding identifier of said first selected one of said one or more subregions;

instructions on the computer usable medium for reducing transmission bandwidth requirements by generating a packaged image, which includes a decoding table comprising said first selected one or more subregions and said corresponding identifier of said first selected one of said one or more subregions in place of said second selected one of said one or more subregions, wherein the decoding table contains all identifiers needed for decoding the data stream; and

inserting said packaged image into said data stream.

18. A computer program product in a computer usable medium for decoding a packaged image, comprising:

a computer usable medium, wherein the medium is a computer hardware storage medium;

instructions on the computer usable medium for determining whether a packaged image is present in a datastream;

instructions on the computer usable medium for, responsive to determining that a packaged image is present in a datastream, extracting the packaged image;

instructions on the computer usable medium for separating the packaged image into an image data structure and a decoding table containing one or more references and one or more corresponding identifiers, wherein the decoding table contains all identifiers needed for decoding the data stream; and

instructions on the computer usable medium for modifying the image data structure to replace any identifiers present in the image data structure with corresponding references, wherein the references represent subregions of at least one image.

24. A computer program product in a computer usable medium for reducing datastream transmission bandwidth, comprising:

a computer usable medium, wherein the medium is a computer hardware storage medium;

instructions on the computer usable medium for examining a datastream for the presence of one or more image data items, wherein the one or more image data items contains data of an image;

instructions on the computer usable medium for, responsive to the presence of one or more image data items, examining the one or more image data items for the presence of one or more repeated visual data elements; and

instructions on the computer usable medium for responsive to the presence of one or more repeated visual data elements, recoding the datastream to include one or more replacement markers inserted to replace the one or more repeated visual data elements and a decoding table for translating the one or more replacement markers during decoding, wherein the decoding table contains all identifiers needed for decoding the data stream.

***Examiner's Statement of Reasons for Allowance***

4. Claims 1-24 are allowed.

The following is an examiner's statement of reasons for allowance.

The prior art fails to the following features in Claims 1, 9, and 17 in combination with other recited limitations:

-- determining that an image data structure is present in a datastream, wherein the image data structure contains data of an image

-- replacing second selected one of said one or more subregions with said corresponding identifier of said first selected one of said one or more subregions;

-- reducing transmission bandwidth requirements by generating a packaged image, which includes a decoding table comprising said first selected one or more subregions and said corresponding identifier of said first selected one of said one or more subregions in place of said second selected one of said one or more subregions, wherein the decoding table contains all identifiers needed for decoding the data stream.

The prior art fails to the following features in Claims 2, 10, and 18 in combination with other recited limitations:

-- separating the packaged image into an image data structure and a decoding table containing one or more references and one or more corresponding identifiers, wherein the decoding table contains all identifiers needed for decoding the data stream; and

-- modifying the image data structure to replace any identifiers present in the image data structure with corresponding references, wherein the references represent subregions of at least one image.

The prior art fails to the following features in Claims 8, 16, and 24 in combination with other recited limitations:

-- responsive to the presence of one or more image data items, examining the one or more image data items for the presence of one or more repeated visual data elements;

-- responsive to the presence of one or more repeated visual data elements, recoding the datastream to include one or more replacement markers inserted to replace the one or more repeated visual data elements and a decoding table for translating the one or more replacement

markers during decoding, wherein *the decoding table contains all identifiers needed for decoding the data stream.*

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wengpeng Chen whose telephone number is 571-272-7431. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 571-272-7453. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 571-273-8300 for After Final communications. TC 2600's customer service number is 571-272-2600.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

/Wenpeng Chen/

Primary Examiner, Art Unit 2624

March 31, 2008